Sovereignty of an optical switch

An optical switch has multiple subcomponents. Usually, a switch manufacturer purchases raw materials from different subcomponent manufacturers. When a network operator purchases switches from different switch manufacturers, there is a possibility that switches from different manufacturers share a common subcomponent. This becomes a vulnerable single point of failure. For example, in the case of laptops, an HP laptop and a Dell laptop can have the same AMD processor.

Our work is related to the trustworthiness of the subcomponent manufacturers. The goal is to evaluate:

a) The trustworthiness of a switch based on the subcomponent manufacturers

b) Provide guidelines to network operators to choose the most sovereign set of switches possible to avoid a single point of failure.

Prerequisites

Python

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